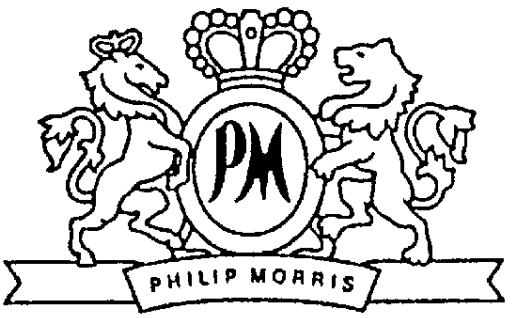


**PHILIP MORRIS PRODUCTS, INC.**

# MEXICO TEST #223

DISTRIBUTION

Mr. R. Arguelles
Mr. M. Becker
Mr. R. Cergneux
Mr. A. Confer
Mr. H. Ganteaume
Mr. M. G. Gomez
Mr. F. A. Lowman
Mr. D. Milby
Mr. J. L. Munoz
Mr. B. Scott
CTSD Data File
Central File

PREPARED BY: S. W. Laffoon
S. W. Laffoon

K. A. Mitchell
K. A. Mitchell

APPROVED BY: R. A. Fenner
R. A. Fenner

DATE: November 24, 1992

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# MEXICO TEST #223

Eight cigarette brands of August production were received from Mexico on September 24, 1992.

The current Marlboro Lights Long Size (Guadalajara) and Marlboro Long Size (Mexico City) cigarettes were not different from their respective previous averages in any of the characteristics tested.

MANUFACTURER — PHILIP MORRIS

| | Marlboro Lights Long Size 20's (Box) Guadalajara | | Marlboro Long Size 20's (Box) Mexico City | | |
|---|---|---|---|---|---|
| | Current | Previous | Current | Previous | U.S.[1] |
| **Smoke** | | | | | |
| Butt Length, mm | 30.0 | 30.0 | 27.0 | 27.0 | 26.0 |
| FTC Tar, mg/cigt. | 11.5 | 11.8 | 15.9 | 16.9 | 15.9 |
| Nicotine, mg/cigt. | 0.83 | 0.84 | 1.12 | 1.17 | 1.16 |
| Puffs/Cigt. | 7.4 | 7.5 | 7.5 | 7.8 | 8.7 |
| **Cigarette** | | | | | |
| Total RTD, mm of $H_2O$ | 101 | 98 | 96 | 94 | 109 |
| Length, mm | 79.2 | 79.2 | 79.2 | 79.0 | 79.4 |
| Circumference,mm | 24.8 | 24.9 | 25.1 | 24.9 | 25.0 |
| **Paper** | | | | | |
| Permeability, ml/cm$^2$ x min. | 24 | 25 | 19 | 18 | 29 |
| **Filter** | | | | | |
| RTD, mm of $H_2O$ | 66 | 69 | 55 | 56 | 68 |
| Length, mm | 19.6 | 19.9 | 19.7 | 19.8 | 18.8 |
| Tipping Paper Length,mm | 27.0 | 27.0 | 24.0 | 24.0 | 23.0 |
| Tipping Paper Color | White | White | Cork | Cork | Cork |
| Ventilation, % | 13 | 18 | None | None | 14 |
| **Filler** | | | | | |
| Total Alkaloids, % (DWB) | 1.92 | 1.82 | 1.85 | 1.88 | 1.91 |
| Total Red. Sugars, % (DWB) | 7.1 | 6.3 | 7.1 | 6.9 | 6.4 |
| Wt. of Tob., g (12.5% OV) | 0.679 | 0.673 | 0.668 | 0.674 | 0.706 |
| Rod Length, mm | 59.7 | 59.4 | 59.5 | 59.1 | 60.6 |
| Rod Density, g/cc | 0.232 | 0.230 | 0.223 | 0.231 | 0.235 |
| Oven Volatiles, % (Equil.) | 13.5 | 13.6 | 13.7 | 13.7 | 13.5 |

[1]Data from C.I. No. 9/92.



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# MEXICO TEST #223

The current Marlboro Long Size (Guadalajara) and Marlboro Lights King Size (Guadalajara) cigarettes were not different from their respective previous averages in any of the characteristics tested.

MANUFACTURER: PHILIP MORRIS

| | Marlboro Long Size 20's (Box) Guadalajara | | | Marlboro Lights King Size 20's (SP) Guadalajara | | |
|---|---|---|---|---|---|---|
| | Current | Previous | U.S.[1] | Current | Previous | U.S.[1] |
| **Smoke** | | | | | | |
| Butt Length, mm | 27.0 | 27.0 | 26.0 | 34.0 | 34.0 | 34.0 |
| FTC Tar, mg/cigt. | 16.8 | 16.8 | 15.9 | 10.1 | 10.5 | 10.6 |
| Nicotine, mg/cigt. | 1.16 | 1.13 | 1.16 | 0.79 | 0.77 | 0.82 |
| Puffs/Cigt. | 7.9 | 8.1 | 8.7 | 7.7 | 7.7 | 8.4 |
| **Cigarette** | | | | | | |
| Total RTD, mm of $H_2O$ | 100 | 104 | 109 | 101 | 98 | 119 |
| Length, mm | 78.8 | 78.9 | 79.4 | 83.9 | 83.9 | 84.0 |
| Circumference,mm | 24.9 | 24.9 | 25.0 | 25.0 | 24.9 | 24.9 |
| **Paper** | | | | | | |
| Permeability, ml/cm$^2$ x min. | 17 | 17 | 29 | 24 | 20 | 34 |
| **Filter** | | | | | | |
| RTD, mm of $H_2O$ | 59 | 58 | 68 | 71 | 71 | 95 |
| Length, mm | 19.7 | 19.7 | 18.8 | 24.6 | 24.6 | 26.7 |
| Tipping Paper Length,mm | 24.0 | 24.0 | 23.0 | 31.0 | 31.0 | 31.0 |
| Tipping Paper Color | Cork | Cork | Cork | White | White | White |
| Ventilation, % | None | None | 14 | 17 | 16 | 26 |
| **Filler** | | | | | | |
| Total Alkaloids, % (DWB) | 1.89 | 1.87 | 1.91 | 1.88 | 1.86 | 1.93 |
| Total Red. Sugars, % (DWB) | 6.6 | 6.3 | 6.4 | 5.7 | 6.4 | 6.8 |
| Wt. of Tob., g (12.5% OV) | 0.701 | 0.686 | 0.706 | 0.706 | 0.694[2] | 0.677 |
| Rod Length, mm | 59.1 | 59.1 | 60.6 | 59.3 | 59.3 | 57.3 |
| Rod Density, g/cc | 0.241 | 0.235 | 0.235 | 0.239 | 0.237[2] | 0.240 |
| Oven Volatiles, % (Equil.) | 13.6 | 13.7 | 13.5 | 13.6 | 13.8 | 13.7 |

[1]Data from C.I. No. 9/92.
[2]Results from Test #222, dated 10/30/92, where a change was noted.



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# MEXICO TEST #223

The current Marlboro King Size (Guadalajara) cigarettes were not different from the previous average in any of the characteristics tested.

A more permeable cigarette paper was observed for the current Benson & Hedges 100 Menthol (Mexico City) cigarettes, returning to the level reported in Test #217. The higher tobacco weight and rod density returned to the levels reported prior to Test #220. The lower total reducing sugars returned to the level reported prior to Test #222.

| MANUFACTURER | PHILIP MORRIS | | | | | |
|---|---|---|---|---|---|---|
| | Marlboro King Size 20's (SP) Guadalajara | | | Benson & Hedges 100 Men.20's (SP) Mexico City | | |
| | Current | Previous | U.S.[1] | Current | Previous | U.S.[1] |
| **Smoke** | | | | | | |
| Butt Length, mm | 27.0 | 27.0 | 28.0 | 33.0 | 33.0 | 35.0 |
| FTC Tar, mg/cigt. | 18.4 | 17.5 | 14.9 | 16.4 | 16.0[2] | 14.7 |
| Nicotine, mg/cigt. | 1.22 | 1.21 | 1.13 | 1.14 | 1.05[2] | 1.13 |
| Puffs/Cigt. | 8.6 | 8.8 | 8.9 | 9.1 | 8.9[2] | 9.7 |
| **Cigarette** | | | | | | |
| Total RTD, mm of $H_2O$ | 102 | 111 | 108 | 117 | 117 | 115 |
| Length, mm | 83.8 | 83.9 | 84.2 | 100.0 | 100.1 | 99.8 |
| Circumference,mm | 25.0 | 24.9 | 24.9 | 24.8 | 24.9 | 24.9 |
| **Paper** | | | | | | |
| Permeability, ml/cm$^2$ x min. | 16 | 17 | 44 | 33 | 23 | 47 |
| **Filter** | | | | | | |
| RTD, mm of $H_2O$ | 55 | 58 | 68 | 66 | 68 | 74 |
| Length, mm | 19.6 | 19.9 | 20.9 | 24.8 | 24.9 | 27.1 |
| Tipping Paper Length,mm | 24.0 | 24.0 | 25.0 | 30.0 | 30.0 | 32.0 |
| Tipping Paper Color | Cork | Cork | Cork | White | White | White |
| Ventilation, % | None | None | 15 | None | None | 16 |
| **Filler** | | | | | | |
| Total Alkaloids, % (DWB) | 1.81 | 1.87 | 1.90 | 1.87 | 1.82[2] | 1.92 |
| Total Red. Sugars, % (DWB) | 6.7 | 6.5 | 6.8 | 5.9 | 7.9[2] | 7.3 |
| Wt. of Tob., g (12.5% OV) | 0.732 | 0.746 | 0.743 | 0.882 | 0.820[2] | 0.859 |
| Rod Length, mm | 64.2 | 64.0 | 63.3 | 75.2 | 75.2 | 72.7 |
| Rod Density, g/cc | 0.228 | 0.236 | 0.237 | 0.240 | 0.221 | 0.239 |
| Oven Volatiles, % (Equil.) | 13.8 | 13.6 | 13.6 | 13.7 | 13.7 | 14.1 |
| **Menthol, mg/cigt** | | | | | | |
| Smoke | - | - | - | 0.57 | 0.57[2] | 0.66 |
| Filler | - | - | - | 2.6 | 2.5 | 3.1 |
| Filter | - | - | - | 1.0 | 1.2 | 1.8 |

[1]Data from C.I. No. 9/92.
[2]Results from Test #222, dated 10/30/92, where a change was noted.



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# MEXICO TEST #224

A larger circumference was observed for the current Benson & Hedges 100 (Mexico City) cigarettes. The lower total reducing sugars returned to the level reported prior to Test #222.

Higher tobacco weight and rod density were observed for the current Marlboro 100 (Mexico City) cigarettes. A smaller circumference and more permeable cigarette paper were also observed.

| MANUFACTURER | PHILIP MORRIS | | | | | |
|---|---|---|---|---|---|---|
| | Benson & Hedges 100 20's (SP) Mexico City | | | Marlboro 100 20's (SP) Mexico City | | |
| | Current | Previous | U.S.[1] | Current | Previous | U.S.[1] |
| **Smoke** | | | | | | |
| Butt Length, mm | 33.0 | 33.0 | 35.0 | 33.0 | 33.0 | 34.5 |
| FTC Tar, mg/cigt. | 16.6 | 17.1 | 15.4 | 16.7 | 17.0 | 15.2 |
| Nicotine, mg/cigt. | 1.12 | 1.22 | 1.22 | 1.21 | 1.17 | 1.17 |
| Puffs/Cigt. | 9.1 | 9.4 | 10.5 | 9.6 | 9.6 | 10.5 |
| **Cigarette** | | | | | | |
| Total RTD, mm of $H_2O$ | 113 | 116 | 114 | 121 | 121 | 118 |
| Length, mm | 100.0 | 99.9 | 99.7 | 100.2 | 99.8 | 99.5 |
| Circumference,mm | 25.2 | 24.9 | 24.9 | 24.5 | 24.9 | 24.9 |
| **Paper** | | | | | | |
| Permeability, ml/cm$^2$ x min. | 26 | 29 | 32 | 39 | 23[3] | 46 |
| **Filter** | | | | | | |
| RTD, mm of $H_2O$ | 66 | 70 | 73 | 67 | 71 | 73 |
| Length, mm | 24.6 | 24.8 | 27.3 | 24.6 | 24.8 | 27.2 |
| Tipping Paper Length,mm | 30.0 | 30.0 | 32.0 | 30.0 | 30.0 | 31.5 |
| Tipping Paper Color | White | White | White | Cork | Cork | Cork |
| Ventilation, % | None | None | 17 | None | None | 16 |
| **Filler** | | | | | | |
| Total Alkaloids, % (DWB) | 1.80 | 1.86 | 1.96 | 1.85 | 1.80 | 1.94 |
| Total Red. Sugars, % (DWB) | 6.5 | 8.5[2] | 7.4 | 6.4 | 6.3 | 7.0 |
| Wt. of Tob., g (12.5% OV) | 0.855 | 0.845 | 0.849 | 0.863 | 0.818[3] | 0.863 |
| Rod Length, mm | 75.4 | 75.1 | 72.4 | 75.5 | 75.0 | 72.3 |
| Rod Density, g/cc | 0.224 | 0.229 | 0.237 | 0.240 | 0.222 | 0.243 |
| Oven Volatiles, % (Equil.) | 14.0 | 13.6 | 13.7 | 13.7 | 13.8 | 13.5 |

[1]Data from C.I. No. 9/92.
[2]Results from Test #222, dated 10/30/92, where a change was noted.
[3]Results from Test #221, dated 9/16/92, where a change was noted.



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